Adult Trauma Emergencies: Crush Sundrome/Prolonged Entrapment



Note Well:

This Protocol is designed to address the treatment of individuals who are entrapped for an extended period of time.

The care that is provided entrapped patients prior to and during extrication can have a profound impact on their ultimate survival. One of the notable conditions that must be treated prior to release of the entrapped individual is Crush Syndrome.

Consider crush syndrome when evaluating patients who are trapped under building materials, pinned inside vehicles, or who are otherwise immobilized for an extended period of time. Consider this condition early in the assessment of the incident scene and consider the need for additional medical resources such as on-line medical direction, scene response by the EMS Medical Director, Assistant Medical Director or EMS Fellow, or Activation of the GO TEAM (see G10, "Protocol for the Activation of the GO TEAM").



Note Well: The following actions must be taken prior to release of the extremities.

All Provider Levels I.

- 1. Refer to the Trauma Assessment Protocols.
- 2. Initiate advanced airway management with Combi-tube if respiratory effort is inadequate.



Note Well:

EMT-I and EMT-P should use ET intubation.

3. Consider the need for additional medical resources.

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II. Advanced Life Support Providers

- 1. Establish an IV of normal saline and titrate to a systolic blood pressure of at least 100 mmHg.
- 2. If symptoms of hypoperfusion are present.
 - A. Administer normal saline boluses of 500 cc 1000 cc to a maximum of 2000 cc.
 - B. Reassess after every 500 cc.
- 3. Attach ECG monitor and pulse oxymeter.
- 4. Carefully monitor for dysrhythmia during the period immediately after release of pressure and during transport.
 - A. Refer to the appropriate dysrhythmia protocol.



III. Transport Decision

1. Transport patient to the closest open appropriate trauma facility.



IV. The Following Options are Available by Medical Control Only

- 1. Continued normal saline fluid bolus, 500 cc 1000 cc.
- 2. Morphine sulfate, 2 10 mg slow IV push (for pain relief).
- 3. Nebulized albuterol (for the treatment of hyperkalemia).
- 4. Sodium Bicarbonate, 1 mEq/kg IV push.
 - A. 0.5 mEq/kg at 10 minute intervals.

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